



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,251	08/05/2005	Richard Perrin	M0025.0319/P319	3630
24998 7590 12/14/2007 DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			EXAMINER KOSANOVIC, HELENA	
			ART UNIT 3749	PAPER NUMBER
			MAIL DATE 12/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/525,251	PERRIN, RICHARD	
	Examiner	Art Unit	
	Helena Kosanovic	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-54, 56-60 and 65-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-54, 56-60 and 65-68 is/are rejected.
- 7) ☐ Claim(s) 55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's amendments filed 10/12/2007 are acknowledged.

Some of the Applicant's arguments are persuasive and therefore this Office Action is made non-final.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

In claim 47, term "mounting member" is not recited in the specification.

In claim 51, term "the actuating member comprising a head" while from the specification is clear that the actuating member is a head member.

In claim 54, term "end piece" is not recited in the specification.

In claim 58, term "camming arrangement" is not in the specification and the examiner treated spring as a camming member.

In claim 65, term "operative member" is not in the specification

The Applicant is required to remove the terms from the claims or to amend the specification in order to clear out the issue.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 44-58 and 65-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Magill 4,184,288.

Magill teaches an invention as claimed:

Regarding claim 44, a damper for an air flow duct comprising: ducting (10); a damper (20, fig. 1) element in the ducting and movable between a first, closed position and a second, open position (figs. 6-7); biasing means (28, 30, col. 5, ll. 67-68 and col. 6, l. 1) biasing the damper element into its closed position; and retention means (fig. 12, col. 5, ll. 62-68) for retaining the damper element in an open position; the retention means comprising: an actuating member (70, figs. 9-11);

a retention member (19, 22 fig.3) which is fixed relative to the damper element (element 19) and can be secured by the action of the actuating member to retain the damper element in an open position, which securing can be released by movement of the actuating member to release the damper element so that the latter is moved by the biasing means into its closed position (col. 5, ll. 62-68, col. 6, l.1);

a body member (68, figs. 10-11) which is fixed to an opening in a circumferential wall of the ducting, the body member having a through-hole (where element 82 is located) which passes from an exterior to an interior of the body member; and a

Art Unit: 3749

movable member (82) in the through-hole and arranged so that it moves when the actuating member moves (fig. 9-11), the movable member being arranged such that it protrudes or protrudes further from an opening in the exterior of the body member when the actuating member moves to release the damper element (figs. 9-11).

Regarding claim 45, the actuating member comprises a temperature-sensitive element (col. 5, ll. 28-32) for releasing the retention member to release the damper element when the temperature-sensitive element reaches a certain temperature (col. 5, ll. 28-29).

Regarding claim 46, the movable member is an axially- movable rod (figs. 9-11).

Regarding claim 47, the body member comprises a cylindrical casing (86) mounted by a holder (fig. 3, see paragraph below where the examiner labeled originally not labeled element with darkened arrow), said opening in the exterior of the body member being in the holder.

Regarding claim 48, body member 68 is extended, the temperature-sensitive element being adjacent one end of the body member and the opening in the exterior of the body member being adjacent the other end of the body member (fig. 9).

Regarding claim 49, the casing is an elongate cylinder (86) and the holder is cylindrical with a bore (hole in the holder/mounting member) in one end receiving an end portion of the cylinder, said opening in the exterior of the body member being at the other end.

Regarding claim 50, the temperature-sensitive element comprises a heat-softenable or meltable material which when hard prevents movement of the movable

Art Unit: 3749

member and when soft or molten permits movement of the movable member (col. 5, ll. 28-32).

Regarding claim 51, the the actuating member comprising a head (70), the temperature-sensitive element being such that the head can move relative to the casing (figs. 10-11) when said certain temperature is reached, the movable member being in contact with or being contactable by the head when the head moves so that the movement of the head causes the movable member to move and protrude or protrude further through said opening (figs. 9-11).

Regarding claim 52, the casing has a recess (see paragraph below where the examiner labeled originally not labeled elements for clarification with darkened arrows), the movable member is within the casing (figs. 9-11), and the head has a detent (triangle part of element 70) engaging in the recess such that when the heat-softenable or meltable material is soft or molten, a force on the head in a direction of its movement with respect to the casing would cam the detent out of the recess in a direction generally at right angles to the direction of movement of the head and release the head, thereby causing the movable member to move, the heat-softenable or meltable material being between the detent and the casing and being such that said force applies a force on the heat-softenable or meltable material generally at right angles to the direction of movement of the head.

Regarding claim 53, the heat-softenable or meltable material is in tension under the action of said force on the head (figs. 9-11).

Regarding claim 54, the head comprises an end piece (end on the right-hand part of element 70) which is adjacent or abuts the end of the movable member (fig. 9), the end piece having elongate detents (left side of the triangle 70) which extend outside the casing and parallel to the movable member (figs. 9-11).

Regarding claim 56, the retention means further comprising a sprung piece (12, fig. 20) fixed to the ducting and acting as an engaging member such that the actuating member capable to engage the sprung piece to press the sprung piece against the retention member.

Regarding claim 57, the damper element is rotatably mounted for movement between its closed position and an open position, and the retention member is generally sector shaped (figs. 6-7).

Regarding claim 58, the retention member has a number of recesses (80, fig. 3) or cut-outs for engagement directly **or indirectly** by the actuating member (fig.2), to provide a number of different open positions of the damper element, of various degrees of opening (col. 5, ll. 55-65), a force being applied directly **or indirectly** to cam one or more elements of said actuation member such (68, fig. 12, col. 5, ll. 55-68) that the respective recess or cut-out will cease to be engaged and the damper element will move into its closed position when the actuating member exerts no pressure on the retention member.

Regarding claim 60, the body member and movable member are in the form of a removable cartridge (col.5, l. 62).

Regarding claim 65, a thermally-actuated mechanism, comprising: a movable operative member (20) which can move between a first position and a second position (figs. 6-7); means biasing the operative member into the first position (28, 30, col.5, ll. 67-638 and col. 1, l.1); and a thermally-actuated cartridge (68) for retaining the operative member in the second position, against the biasing of the biasing means, the cartridge comprising: a temperature-sensitive element (70); a head (70) associated with the temperature-sensitive element, for movement when the temperature-sensitive element reaches a certain temperature to thereby release the operative member; a movable member (82) which is caused to move when the head moves; and a body (68) surrounding the movable member and having an external opening through which the movable member can protrude; the arrangement being such that when the thermally-sensitive element reaches said certain temperature, the movable member moves and protrudes or protrudes further through the opening (col. 5, ll.55-68).

Regarding claim 66, a damper (fig.1) for an air flow duct comprising: ducting (16); a rotary damper element (20) carried on an axle (fig. 19) in the ducting and movable between a closed position and an open position (figs. 6-7); biasing means (28, 30) biasing the damper element into its closed position; and retention means (fig.12, col.5, ll. 65-68) retaining the damper element in an open position; the retention means comprising: an actuating member (70); a retention member (19, 23, fig. 3) which is fixed relative to the damper element and is secured by the action of the actuating member to retain the damper element in an open position, which securing can be released to release the damper element so that it is moved by

Art Unit: 3749

the biasing means into its closed position (); and

a support member (38a figs. 15-16) fixed to the circumferential wall of the ducting and supporting at least part of the retention means, the support member having a base (38, 38a) and at least a first limb (100), at a substantial angle to the base (figs. 15-16), which limb is adjacent the inner circumferential wall of the ducting and has a notch (circles on element 38, fig. 16) on its open end passing over the damper element axle; and

securing means (102) securing the limb to the inner circumferential wall of the ducting at a position between the axle and the base of the support member.

Regarding claim 67, the support member has a further limb (lower element 100, fig. 16) on the opposite side of the retention member to the actuating member, which further limb acts as a backing piece and wherein the support member has a further limb in the form of a sprung piece (12, fig. 20) on the same side of the retention member as the actuating member, which sprung piece is pressed against the retention member by the actuating member when the damper flap is retained in an open position (fig. 1), whereby when the damper flap is retained in an open position, the actuating member presses the sprung piece against the retention member which in turn is pressed against the backing piece (figs. 1, 15-16).

Regarding claim 67, a damper 20 for an air flow duct comprising: ducting 10 (fig. 1); a damper element 20 in the ducting and movable between a first, closed position and a second, open position (figs. 6-7);

biasing means (28, 30, col. 5, ll. 67-68 and col6, l. 1) biasing the damper element into its closed position; and retention means (fig. 2, col. 5, ll. 62-68) for retaining the damper

Art Unit: 3749

element in an open position, the retention means comprising: an actuating member 72 (fig. 2); a retention member 19, 22 and 28 (figs. 2 and 3) which is fixed relative to the damper element and which can be secured by the actuating member bearing on the retention member to retain the damper element in an open position, which securing can be released by movement of the actuating member away from the retention member to release the damper element so that the damper element is moved by the biasing means into its closed position (col. 5, ll. 50-68);

a body member (68, fig. 9-11) which is fixed to an opening in a circumferential wall of the ducting, the body member having a through-hole (hole within the body member) which passes from an exterior to an interior of the body member; and

a movable member 82, (fig. 12) in the through-hole and arranged so that it moves when the actuating member moves, the movable member being arranged such that it protrudes or protrudes further from an opening in the exterior of the body member when the actuating member moves to release the damper element.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3749

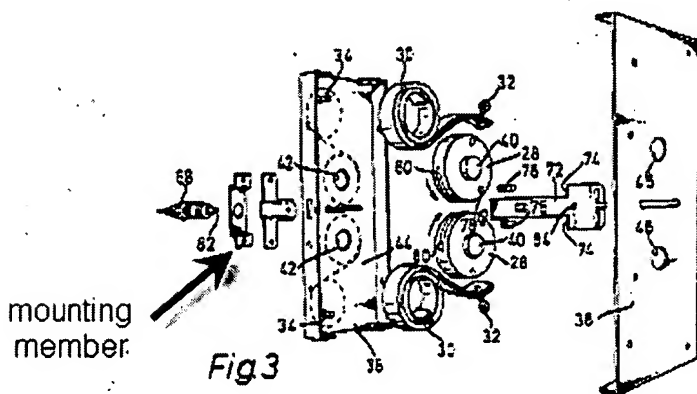
2. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Magill 4,184,288 in view of Nailor 5,779,540.

Magill teaches the invention as discussed above, but is not specific about micro switch.

Nailor teaches a damper having a micro switches 92, 94 (col. 8, ll. 37-38), and 160 (col. 8, l. 51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have the Magill invention modified with the Nailor micro switches in order to provide indication whether the blades are open or closed (col. 8, l. 43-50) if the sufficient amount of smoke (or temperature) is detected in the room (col. 8, ll. 56-60).

3. The examiner labeled originally not labeled elements for clarification:



(fig. 3, of Magill)

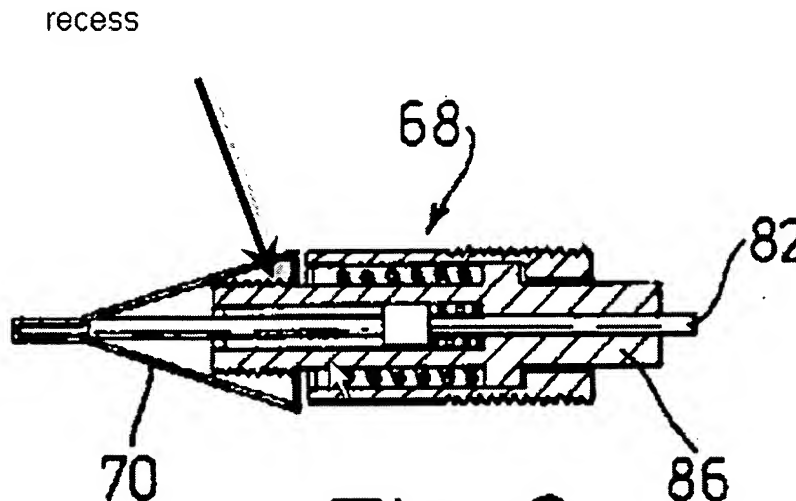


Fig. 9

(fig. 9 of Magill)

Allowable Subject Matter

Claim 55 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Art Unit: 3749

Applicant's arguments filed 10/12/2007 have been fully considered but they are not persuasive.

The applied prior art meeting all structural limitation and functionalities as claimed. It anticipates claimed invention, as is capable to perform all intended use functions as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helena Kosanovic whose telephone number is (571)272-9059. The examiner can normally be reached on 8:30-5:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Steve Mc Allister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Helena Kosanovic
Examiner
Art Unit 3749

121007



**STEVEN B. MCALLISTER
SUPERVISORY PATENT EXAMINER**